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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,040	03/18/2004	Deborah L. MacPherson		6549
41426	7590	03/03/2008		
DEBORAH L. MACPHERSON			EXAMINER	
512 BEULAH ROAD N.E.				RAYYAN, SUSAN F
VIENNA, VA 22180			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/803,040	MACPHERSON, DEBORAH L.	
Examiner	Art Unit		
Susan F. Rayyan	2167		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 04 December 2007.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 11-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 11-30 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 04 December 2007 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date . 5) Notice of Informal Patent Application
6) Other: ____ .

DETAILED ACTION

- 1. An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.**
- 2. A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450.**
- 3. Claims 1-10 are canceled.**
- 4. Claims 11-30 are currently pending.**

Claim Rejections - 35 USC § 101

5. Claims 26- 29 are method claims.

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter.

Claims 11-25, 30 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claim 11 is a system claim which recites an assembly processes for connecting, breaking apart ..., implementing a topological record keeping function..., a shared memory area..., control mechanisms ... and address prioritizing system The specification does not indicate the assembly processes, topological record keeping function, shared memory area, control mechanisms ... or address prioritizing system ... is only hardware. Examiner has interpreted the elements as software per se. The system is software per se and therefore non-statutory.

Dependent claims 12-16 are software per se and therefore directed to non-statutory subject matter.

Claim 17 is a system claim which recites wherein boundaries representing information wholes in context are cleaned of potential ideas and information ... The claim is directed towards a system claim without system elements which include hardware. The claims are software per se.

Dependent claims 18-25 are software per se and therefore directed to non-statutory subject matter.

Claim 30 is directed to a signal claim. A signal claim does not fall within one of the four statutory categories of invention. A signal is not a “process”, “machine”, “manufacture”, or “composition of matter”. A signal is not a process as it is not a series of steps. A signal is not a machine as the term machine includes every mechanical device or combination of devices to perform a function and produce a certain result. A signal is not a manufacture which is a production of articles for use from raw material. A product is a tangible physical article or object which a signal is not. A signal is not a composition of matter which covers all compositions of two or more substances. The signal does not fall within any of the four statutory classes of 35 USC 101 and therefore rejected as non-statutory subject matter.

Claim Rejections - 35 USC § 112

7. The following rejections under 35 U.S.C. 112, first paragraph and under 35 U.S.C. 112, second paragraph are representative of the 112, first paragraph and second problems found throughout claims 11-30.

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 11, recites “assembly process for connecting, breaking apart, and organizing data into groups”, a topological record keeping function using virtual forms …”, address prioritizing system”. Examiner was unable to locate these limitations in the specification.

Claim 17, recites “wherein boundaries representing information wholes in context are cleaned of potential ideas and information...” Examiner was unable to locate these limitations in the specification.

Claim 22, limitation “portraits”. Unable to locate in specification.

Claim 30, recites wherein broadcast ideas and information ...", "wherein the topologies are capturing pure mathematical relationship not yet associated with images ...", wherein the system" is helping ..." Examiner was unable to locate these limitations in the specification.

Claims 11-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 11, recites "assembly process for connecting, breaking apart, and organizing data into groups", drawing reference arcs", a topological record keeping function using virtual forms ...", "an address prioritizing system". Examiner was unable to locate these limitations in the specification.

Claim 17, recites "wherein boundaries representing information wholes in context are cleaned of potential ideas and information". Examiner was unable to locate these limitations in the specification.

Claim 30, recites wherein broadcast ideas and information ...", "wherein the topologies are capturing pure mathematical relationship not yet associated with images ...", wherein the system is helping ..." Examiner was unable to locate these limitations in the specification.

Claim Objections

9. Claims 11-12, 17, 22 are objected to because of the following informalities: claims include references to Figures. Appropriate correction is required.

10. **The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 11-30 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

12. The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The

claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Claims 11-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, recites “limitless groups” is indefinite as it is an infinite number.

Claim 12, recites “fixed and fluid forms”. Indefinite as to what is a fixed or fluid form.

Claim 13, recites “track which data has made sense together in the past”. Indefinite as to what would “makes sense”.

Claim 13, “measuring way people think...”, indefinite as to how a machine measures the way people think.

Claim 17, recites “wherein boundaries have no scale because they are every scale”. This statement is contradictory and therefore indefinite.

Claim 18, recites “is complaint with National Institute of Standards and Technology policy” is indefinite as NIST policies change.

Claim 18, recites http/:, indefinite as web addresses are not permanent (remove from claim).

Claim 21, recites “ideas we do not understand with the ideas and knowledge we do understand”, unclear as to the metes and bounds.

Claim 22, recites “known and unknown” is indefinite as to what is considered known data and unknown data.

Claim 22, recites ” people”, limitation may not claim people.

Claim 27, recites “wherein the language is leading users and machines to original information precisely regenerated in context”, limitation is unclear and indefinite as to the meaning.

Claim 29, recites “topologies are becoming like real objects people form attachments”, indefinite as how topologies become real objects.

Claim 29, recites “human perception” and “machines are affected”. These limitations are indefinite as how to define human perception and how the machine is affected.

Claim 30, recites” wherein the system is helping us, as individuals and global society to work with, weed out, and control data …to create bigger pictures and capture elusive beauty. This limitation is indefinite as to how the system creates a bigger picture and captures elusive beauty.

Claim Rejections - 35 USC § 102

14. Examiner has rejected the claims as best understood by the claim language and specification.

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 11-30 are rejected under 35 U.S.C. 102(e) as being anticipated by US

Patent Publication Number 2004/0148296 issued to Arno Schaepe et al

("Schaepe").

As per claim 11 Schaepe anticipates:

A system for creating and managing a stateless space with a shared memory area to for standardize data and network topologies by integrating computer generated histories wherein data is collectively evaluated to determine which data and data structures persists and continues to be distributed over time (see abstract), comprised of the following:

an assembly process for connecting, breaking apart, and organizing data into groups ...wherein(paragraph 24, as process data into topological context, limitations following a wherein carries no patentable weight);

marking groups by time, location, and purpose, drawing reference arcs (paragraph 28 and figure2, arcs);
implementing a topological record keeping function using virtual forms representing relative placement of data components within larger configurations ... (paragraph 10, as mapping data information into a data object);
a shared memory area for registering, intertwining, tracing, and comparing data histories in infinitely large groups organized by context and location wherein (paragraph 23, as extracting information and computer implemented, limitations following a wherein carries no patentable weight);

control mechanisms for overlaying and streamlining similar data and data arrangements until there are no redundancies to enable the identification and ranking of originals Wherein (paragraph 31, as overlay , limitations following a wherein carries no patentable weight);
an address prioritizing system to characterize data deserving higher placement and broader distribution in future designs and automated assemblies... wherein (paragraph 35, as address and hierarchical level, limitations following a wherein carries no patentable weight);
compiler/broadcasters seeking and distributing specific information by type as

recognized by its topology... wherein ... (paragraph 10, as mapping data into data object network, limitations following a wherein carries no patentable weight);

programming standards for broadcasting specified data configurations in context wherein, Context Driven Topologies remain mathematically the same and recognizable for parallel machine processing of limitless groups in the stateless space regardless of the ways they are simplified and selectively distributed and displayed in real space and time ... wherein ... (see figure 1, representation of a structure of semantic cognition network, limitations following a wherein carries no patentable weight).

Claims 12-16 are rejected based on the same rationale as claim 11 above.

As per claim 17 Schaepe anticipates:

wherein boundaries representing information wholes in context are cleaned of potential ideas and information, fixed into a group, and made into a single boundary ... wherein ... (paragraph 24, as process data into topological context, limitations following a wherein carries no patentable weight);
wherein boundaries are compressed into fixed symbols to serve as a single character in each components existing unique identifiers including existing URLs, museum object numbers, article and publication numbers, geographic locations

and place marks, subject matters by area in the shared memory, and adaptable to all information identifiers assigned by information originators and interpreters ..wherein ... (see figure 1-2, limitations following a wherein carries no patentable weight);

wherein topologies in the symbol state with massive amounts of information inside yet a small description outside look ready to burst, while symbols with infinite complicated and overlapping descriptions but simple information inside is wrinkled, yet from far away both look the same ... (see figure 1-2, limitations following a wherein carries no patentable weight);

wherein boundaries are made of vectors able to scale without pixilation ... (see figure 1-2, paragraph 5, pixel) ;

wherein every boundary is continuous and never breaks down while users are interpreting information of different scales through the topologies directly rather than through the original information itself ... (figure 1 and figure 2);

wherein the boundaries have no ,scale because they are every scale;

wherein the boundaries have no inherent thickness, they are built layer .by layer or initially connected arc by arc... (Figure 2, arcs);

wherein fixed boundaries serve as descriptions linking information together as it is streamlining in and out of the shared memory area of the stateless space ... (Figure 1-2, boundaries);

wherein the tools and controls for drawing the boundaries is accomplished through computer graphics processing, operator interface, and selective visual

display ... (Figure 3, as developer studio, limitations following a wherein carries no patentable weight);

wherein the causes and effects of changing boundaries and fixing them into symbols is accomplished through data and network processing, thus context is driving the topology of data structures and known topologies are standardizing for specified data uses ... (figure 3, and paragraph 23, as extracting information and networks, limitations following a wherein carries no patentable weight).

Claims 18-30 are rejected based on the same rationale as claims 11-17 above.

Response to Arguments

16. Applicant's arguments filed December 4, 2007 have been fully considered but they are not persuasive.

17. Regarding the Applicant's response to the rejections under 35 U.S.C. 112, first paragraph and under 35 U.S.C. 112, second paragraph, Examiner has reviewed the citations provided and still does not see the support. For example, Applicant indicated "topological record keeping function using virtual forms" as located in sections 1.1 and section 10. Examiner reviewed these sections and did not see the support for this limitation.

Applicant argues prior art of record does not teach an assembly process for connecting, breaking apart, and organizing data into groups. Examiner finds Schaepe does teach this limitation at paragraph 24, as process data into

topological context and processing data structures such as audio data, text data or statistically acquired data into topological context.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., how data structures are made or how they are changed by systems) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues prior art of record does not teach marking groups by time, location, and purpose, drawing reference arcs. Examiner finds Schaepe does teach this limitation at paragraph 28 and figure2, as arcs and various processing objects are connected via linking objects.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., drawing reference arcs varies in length, radius and rotation allowing context driven topologies to be reconfigured and reordered into different priorities depending on tasks or user view points) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues prior art of record does not teach a topological record keeping function. Examiner finds Schaepe does teach this limitation at paragraph 10, extract information from input data by mapping data information into a data object).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., topological record keeping functions implemented by recording sets of established data compositions and pathways in and out of stateless space) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues prior art of record does not teach control mechanisms for overlaying and streamlining similar data. Examiner finds Schaepe does teach this limitation at paragraph 31, as comparing objects are displayed in the overlay.

Applicant argues prior art of record does not teach a shared memory area for registering, intertwining, tracing, and comparing data histories in infinitely large groups organized by context and location. Examiner finds Schaepe does teach this limitation at paragraph 23, as extracting information and computer

implemented and paragraph 23, as paragraph as graphical user interface and display overlay.

Applicant argues prior art of record does not teach an address prioritizing system to characterize data deserving higher placement and broader distribution in future designs and automated assemblies. Examiner finds Schaepe does teach this limitation at paragraph 35, as address and hierarchical level.

Applicant argues prior art of record does not teach compiler/broadcasters seeking and distributing specific information by type as recognized by its topology. Examiner finds Schaepe does teach this limitation at paragraph 10, as mapping data into data object network.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., waveforms, varying state of their data structures, or identical mathematical translation between varying modes of interpretation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant argues prior art of record does not teach programming standards for broadcasting specified data configurations in context wherein, Context Driven

Topologies remain mathematically the same and recognizable for parallel machine processing of limitless groups in the stateless space regardless of the ways they are simplified and selectively distributed and displayed in real space and time . Examiner finds Schaepe does teach this limitation at figure 1, representation of a structure of semantic cognition network.

Applicant argues prior art of record does not teach changing the boundaries and fixing them into symbols. Schaepe does teach this at Figure 3 and paragraph 33 as extracting information and computer networks.

Conclusion

18. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

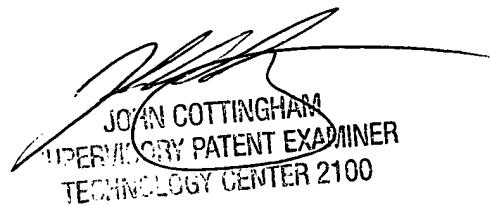
Contact Information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan F. Rayyan whose telephone number is 571-272-1675. The examiner can normally be reached on M-F, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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2/29/2008


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